

Claims

1. Method for determining the type of transmission of signaling  
5 information between a first and a second packet network  
terminal for a simplifying processing of the signaling  
information with relation to a dialogue with a speech dialogue  
system in a packet network (IPNet), in which
  - a speech dialogue system (IVR1) without special hardware
  - 10 devices for the support of in-band signaling is specified as  
one of the packet network terminals,
  - codecs with in-band signaling are avoided for the  
transmission of signaling information, and
  - either a codec with out-of-band-signaling supported by both
  - 15 packet network terminals or signaling by means of specially  
labeled data packets is determined for the transmission of  
signaling information.
2. Method according to claim 1,  
20 characterized in that  
the signaling is carried out by means of specially labeled data  
packets in accordance with the IETF Standard RFC 2833.
3. Method for determining the type of transmission of signaling  
25 information between a first and a second packet network  
terminal for a simplifying processing of the signaling  
information with relation to a dialogue with a speech dialogue  
system in a packet network (IPNet), in which
  - a speech dialogue system (IVR1) without special hardware for
  - 30 the support of in-band signaling is specified as the second  
packet network terminal,
  - a codec supported by both packet network terminals is  
determined for the transmission of signaling information, and

- the speech dialogue system (IVR1) is controlled by a control device (CS2) that, independently of the selected codec, sends a signaling message to the first packet network terminal, which message stipulates the use of out-of-band signaling.

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4. Method according to one of the preceding claims, characterized in that with relation to a codec negotiation/determination a codec is selected that is supported by both packet network terminals.

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5. Method according to one of the preceding claims, characterized in that the transmission of signaling information with relation to the automated information output is carried out by means of DTMF

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(Dual Tone Multiple Frequency) characters.

6. Method according to one of the preceding claims, characterized in that

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the speech dialogue system (IVR1) is controlled by a control device (CS2), which is represented by a packet based exchange, a call server, a proxy server or a soft switch.

7. Method according to one of the preceding claims, characterized in that

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- in the case that for the transmission via the packet network (IP-Net) a codec with out-of-band signaling or signaling according to RFC 2833 supported by both packet network terminals cannot be determined or the first packet network terminal does not permit out-of-band signaling for codecs

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supported by both packet network terminals,  
- a speech dialogue system (IVR2) supporting in-band signaling is specified as a packet network terminal instead of the speech dialogue system (IVR1) without special hardware for the support

of in-band signaling, and

- a coding method with in-band signaling is determined for the transmission of the signaling information.

5 8. Method according to one of the preceding claims, characterized in that  
with relation to the dialogue with the speech dialogue system, an automatic output of information, speech information, video information or both is undertaken.

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9. Speech dialogue system (IVR1) without special hardware for a simplifying processing of signaling information with relation to a dialogue with means for the implementation of a method according to one of the claims 1 to 8.

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10. Device for a simplifying processing of signaling information with relation to a dialogue with a speech dialogue system in a packet network, with

20 - a speech dialogue system (IVR1) without hardware devices for the support of in-band signaling, and  
- a control device (CS2) controlling the speech dialogue system (IVR1), whereby the device is set up such that in a selection of a codec for an automated information output, codecs with in-band signaling are not permitted.

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11. Device for a simplifying processing of signaling information with relation to a dialogue with a speech dialogue system in a packet network, with

30 - a speech dialogue system (IVR1) without hardware devices for the support of in-band signaling,  
- a speech dialogue system (IVR2) with special hardware for the support of in-band signaling, and  
- a control device (CS2) with means for the selection of one of

the two speech dialogue systems (IVR1, IVR2) for a speech dialogue service or an information output service dependent on the codecs offered at the service requirement.

5 12. Control device (CS2) with means to require out-of-band signaling, independently of the codec selected with relation to a codec negotiation/determination.

10 13. Control device (CS2) according to one of the claims 9 to 12,  
characterized in that  
the control device is represented by a packet based exchange, a call server, a proxy server or a soft switch.